

AN 2002:750775 HCAPLUS  
DN 137:282768

TI Brass with crystal structure comprising soft phase and hard phase and having good cutability

IN Matsubara, Ryuji

PA Toto Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002285263	A2	20021003	JP 2001-87461	20010326
PRAI JP 2001-87461		20010326		

AB A brass with an apparent Zn content of 37-50% and Sn content of 0.5-7% has a crystal structure comprising a soft phase and a hard phase, where a brittle phase is located on the interface between the soft and hard phases. The structure is  $\alpha$ . +  $\gamma$  with the area ratio of  $\alpha$ . and  $\gamma$  being 60-95% and 5-40%, resp. or  $\alpha$ . +  $\beta$  +  $\gamma$  (40-95, 1-30, 5-30 area%, resp.). The brittle phase is from a compound containing 0.01-0.2% S, Ti, and/or Zr. The brass has excellent cutability and the problem of Pb elution is resolved.